MISCELLANEOUS FACILITIES

Solid Waste Disposal

The county's Solid Waste Management Division provides a variety of waste disposal services to county residents. These services include biweekly trash collection, leaf and yard waste pickup, bulky waste collection, hazardous waste and recycling drop-off facilities. The division also oversees the operation of transfer stations at two former landfill sites.

Trash Collection: County household trash collection services are available to every county resident. Private trash collection companies also offer household trash collection throughout most of the county. County residents may also haul household trash, yard debris, and bulky waste to county transfer stations for disposal.

Other Waste Collection: The county offers pick-up and disposal for bulky household waste (e.g. large appliances and furniture), and seasonal leaf collection (vacuum and bagged leaf collection) for non-rural areas. The county also operates a household hazardous waste drop-off and disposal program at the transfer stations. This program handles waste products such as engine fluids, household chemicals, pesticides, etc. The county contracts with private contractors for proper disposal or recycling of collected hazardous materials.

Solid Waste Disposal: The county no longer operates active solid waste landfills, and there are no plans to site public landfills within the county. The county oversees four closed landfills to insure that they are properly managed in compliance with environmental regulations. Most county waste is processed at the Shoosmith sanitary landfill. Private waste haulers also use landfills located outside of the county.

Recycling: County recycling facilities are provided in cooperation with the Central Virginia Waste Management Authority (CVWMA). A CVWMA curbside recycling collection program is currently available to all single-family homes in the county. The county also operates permanent recycling convenience centers (drop-off/transfer points for glass, newspaper, plastics, and metal) at the Northern and Southern Area Transfer Stations, Watkins Elementary School, Woodlake Central Park, and Cloverleaf Mall. In addition, drop-off points for aluminum cans and newspapers are located at various county schools. The county currently exceeds the state-mandated 25 percent recycling rate, and achieves a recycling rate of approximately 38 percent. No additional permanent collection facilities are planned. Due to the success of the curbside recycling program, and subsequent reduced demand for drop-off recycling, the county is considering closure of some existing recycling centers.

CVWMA: Background/Analysis

The CVWMA is a public service authority formed by 13 central Virginia jurisdictions. CVWMA has adopted a coordinated solid waste management plan for the Richmond metro area, including Chesterfield County.

County Airport

Chesterfield County Airport, located northwest of the intersection of Routes 288 and 10, is designated as a General Aviation Airport, providing facilities mainly for privately owned aircraft for business and personal use. It is also a designated reliever to Richmond International Airport. The designation and function of the airport are not projected to change over the planning period. The Chesterfield County Airport Master Plan Update 1993 - 2012 was completed in 1994. The full document and related graphics are available for review by contacting the County Airport (743-0771). The Master Plan recommends a variety of physical improvements to airport facilities, and removal of obstructions to instrument landing systems. The Master Plan forecasts future service demands and recommends facility improvements through the year 2012. An increase in annual aircraft operations of nearly 40 percent is projected by 2012. Due to crosswind patterns and the high level of usage by small craft, a second runway is recommended as a long-term improvement. Other Master Plan improvements include taxiways, lighting, hangars, storage, and parking.

Energy and Communications

Energy and communications services provided to county residents are essential to the development of the community. The need for these facilities accelerates with the development of land, while appropriate sites for their construction become scarce. Communications towers, various types of transmission lines, substations, and other such facilities should be compatible with the character of the community. Many of these facilities require county review through the substantial accord determination process. This process has been established to insure that public facilities are developed substantially in accord with the adopted Comprehensive Plan. The Federal Telecommunications Act of 1996 limits local authority over certain aspects of communications towers.

In addition, rapid market growth and changing telecommunications technology requires county review of these facilities to be flexible and adaptable. For this reason, the county has adopted guidelines for telecommunications facilities subject to the substantial accord review process. These guidelines, originally adopted by the Board of Supervisors and amended in 2002, are pending revision. The following policy standards are intended to provide general direction for the location and character of energy and communications facilities, with the intent that site-specific evaluations will be performed through the substantial accord process, using the telecommunications guidelines.

Locational Criteria

- Co-locate facilities whenever feasible. Use existing improvements for new equipment whenever possible.
- Locate facilities so as to minimize impacts on existing and future areas of development.
 Minimize locations adjacent to planned or existing residential development. Grouping facilities in industrial or remote areas is encouraged.
- Provide adequate acreage for expansion, including area to maintain adequate levels of screening to accommodate expansion.
- Sites with existing mature vegetation or topographical features which provide screening are preferred due to their natural ability to mitigate visual and noise impacts.

Other Criteria

- Transmission lines: Visual impact (public views) should be a key element in the evaluation of proposed facilities. Underground facilities are preferred wherever possible.
- Design facilities to minimize impacts on adjacent properties.
- Telecommunications facilities should be consistent with the adopted guidelines for telecommunications facilities subject to the substantial accord review process.

STORM WATER DRAINAGE

Introduction

This <u>Plan</u> element discusses existing plans and programs related to storm water drainage systems.

Existing Facilities

Storm water runoff is ultimately conveyed to adjacent/nearby waterways countywide. Key facility elements in this process include drainage ditches, swales, filters, retention areas (for long-term water holding), and detention facilities (for short-term water holding prior to ultimate release into nearby waterways). These ponds are referred to as "best management practice" (BMP) facilities. Drainage facilities are most often built in conjunction with new development projects (subdivisions, commercial developments, etc.) as a developer responsibility. Retrofits and upgrades of existing system deficiencies (especially in older developed areas) occurs on an incremental, funds-available basis, through the Capital Improvements Program. The Environmental Engineering Department undertakes maintenance of the retention and detention ponds located in residential areas. The property owners maintain those facilities located in commercial areas.

Major drainage systems are typically developed to manage the quantity and quality of storm water runoff water in response to the Federal Clean Water Act, and requirements of the Chesapeake Bay Preservation Act.

Level of Service

The National Pollutant Discharge Elimination System (NPDES) Program, a component of the Clean Water Act (CWA), requires localities to ensure that pollutants entering their storm sewer systems are reduced to the "Maximum Extent Practicable." To achieve this goal, Federal CWA regulations require localities to develop and implement storm water management programs that include measures to provide:

- A comprehensive planning process that involves public participation and intergovernmental coordination
- A description of management practices, control techniques, and system design and engineering methods to reduce the discharge of pollutants to the storm sewer system to the Maximum Extent Practicable
- A description of resources and equipment available to implement the storm water management program
- Programs to control storm water runoff from commercial and residential areas, construction sites, and industrial facilities
- Identification and maintenance of structural control measures such as retention and detention ponds
- A program for the detection and removal of illicit discharges and to control and prevent improper disposal into the storm sewer system of any materials not composed entirely of storm water

Accordingly, the county Office of Water Quality has developed a comprehensive storm water management program that includes, public education and outreach, BMP retrofit and maintenance, water quality monitoring, and enforcement of the following water quality ordinances: Chesapeake Bay Preservation Act, Illicit Discharge Ordinance, and the Erosion and Sediment Control Ordinance. In addition to the water quality ordinances, the Environmental Engineering Department also enforces the Floodplain Management Ordinance, which limits the amount of activities and development in floodplains.

Planned Facilities

System wide Improvements: From 2003 through 2008, the Office of Water Quality will be identifying segments of the storm sewer system that need to be retrofitted or improved in order to achieve the CWA requirements and the NPDES Permit. A prioritized listing of areas in the greatest need of improvement will be developed. The Environmental Engineering Department will also continue to identify components of the storm sewer system requiring improvement and/or enhancement.

Regional BMPs: Regional BMPs will be developed within the Swift Creek Reservoir watershed, under the Watershed Management Plan and Maintenance Program for the Swift Creek Reservoir Watershed. Regional BMPs are intended to insure that in-lake phosphorus concentrations do not exceed .05 milligrams per liter. Construction of these facilities will be fully funded by developers, and the county will have responsibility for long-term facility maintenance. Maintenance costs will be partially offset by a new \$100 per dwelling unit fee paid by new residential developers in the area.